

No 102

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On 350 Market

Useful as a practical Essay in favour of Emmet's  
to cure Salivation - The Proprietor's part may, or  
not, be correct - Inaugural Essay

On

Mercurial Salivation

Printed March 7<sup>th</sup> 1828

for

the degree of Doctor of Medicine

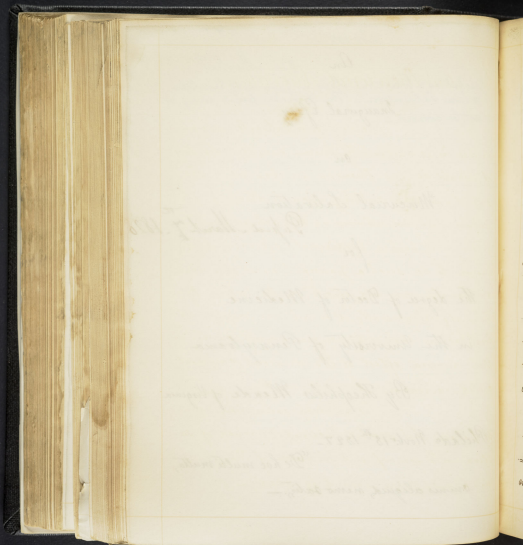
in the University of Pennsylvania

By Theophilus Meade of Virginia

Philad<sup>a</sup> Nov<sup>r</sup> 13<sup>th</sup> 1827.

"De hoc multi multa,

omnis aliquid, nemo satis, —



## On Mercurial Salivation.

Mercury as a valuable medicinal article is so universally known and admitted that it would be superfluous in an essay like the one I am now entering upon to treat of its virtues. But notwithstanding the acknowledged fact of its highly medicinal efficacy, it is known to be such a powerful agent as to induce occasionally very bad effects in the system. Of these effects generally it is not my purpose to treat, as my wish is to confine myself chiefly to that diseased effect of the mineral commonly called salivation.—

Mercurial salivation may be defined that morbid increased secretion of Saliva with soreness and ulceration of the gums, mouth and throat, produced by mercury.—





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The disease occurs in all constitutions and may take place in a very short time after the commencement of the use of the mercury, or it may not show itself for several days or weeks. Dr. James Hamilton relates a case of salivation which did not appear until the expiration of four years after the use of the blue pill for a fortnight. The gums in this case were but slightly touched during the exhibition of the pill and it was not until the end of the time mentioned that a violent salivation ensued. - No mercury had been given in the interval and the patient enjoyed for the time good health.

Generally the disease appears during or a very short time after the exhibition of the mercury and after a perfect cure, never appears again until fresh mercury has been given. But after very violent cases of the disease, it is apt to return on exposure to bad weather if



care be not taken to cure it radically before permitting the patient to resume his former habits of life. I know myself, a young lady who was violently salivated during the spring, of 1826 and apparently recovered perfectly, but on much exposure to a cold and damp atmosphere she becomes troubled with a slight return of the disease. —

The disease of the mercury is supposed to remain dormant in the system in such cases until called into play by some of its exciting causes. —

Mercurial salivation does not always depend upon the quantity of the mercury exhibited, for very small quantities sometimes induce the disease as speedily as large ones. This is owing to some peculiarity of the patient's constitution. Some constitutions can bear enormous quantities of mercury without suffering in the least from its morbid influence, whilst others suffer very much



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from the slightest dose. —

**Exciting Causes.** — The causes tending to excite or to aggravate mercurial salivation after its excitation are exposure to cold and moisture, the use of spirituous liquors and stimulating articles of diet. A full habit also by keeping <sup>up</sup> the inflammatory diathesis aggravates it in a great degree. —

**Symptoms.** — At whatever period the disease takes place after the use of mercury, it discovers itself by a slight dryness and heat about the mouth, a hoarse tone and tenderness of the gums. An increased secretion of saliva soon follows and the breath becomes fetid. In some cases the face swells enormously, the mouth and throat take on violent inflammation and ulceration, the tongue enlarges and protrudes beyond the teeth, the gums ulcerate, bleed profusely and slough, and the inside of



the cheeks and lips sometimes put on a deep  
cherry red colour in spots which rapidly pro=  
=ceed to gangrene. The pulse is quick and irri=  
=table and the patient extremely restless. The  
inflammation about the mouth and throat  
is often extremely painful and annoying even  
before the commencement of the ulcerative  
process. —

Dr Richard Field formerly of Petersburg,  
Virginia and perhaps well known by some of  
the professors of this Institution, has been in  
the habit of late, of distinguishing four species  
of mercurial inflammation. —

In the first a  
general inflammatory action takes place giving  
the mouth, tongue, throat and the insides of  
the cheeks and lips a deep red colour.

In the second  
an aphthous crust appears on the fauces, the





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uvula and sides of the tongue.

The third species occurs in worn out constitutions. The mouth takes on a general inflammation and an ulcer resembling in colour the inside of the mouth of a fish seizes on the angles of the jaw and spreads to the adjoining parts.

In the fourth and last species a black speck about the size of a pea is first seen between the under lip and gums which soon sloughs off.

Dr. Leild met with a case of this last description in a boy about ten years of age, from a single dose of Calomel. After the slough took place gangrene commenced through out the gums in the fore part of the mouth and the inside of the under lip soon began to put on appearances of the same condition. It would be well to

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mention here that this case was effectually cured by one or two emetics assisted by mild astringent washes for the mouth. -

The different species of inflammation mentioned above, never require a different treatment, but may be managed by one and the same method. -

Diagnosis. - A mercurial ulcerated throat has been mistaken for the ulcer of the cynanche tonsillaris and treated accordingly. - The patient had taken calomel previous to the call of the physician and the family with which he lived being fearful of having done wrong in giving him the medicine concealed the fact until the physician discovered from the mercurial fotor that mercury had been given him. The peculiar fotor therefore which results from the action



of mercury in the mouth and throat will serve as a good characteristic mark of the mercurial affections of these parts. It is also possible to mistake a mercurial ulcer in the throat for a syphilitic one. These two ulcers however may be distinguished by the mark just mentioned and the history of the case.

Treatment.—The chief part of the treatment I would recommend in inordinate salivations, consists in the exhibition of emetics. This practice was accidentally discovered by Dr R. Seild to whom I have before referred. He had a patient labouring under hemorrhage from the bowels brought on by the excessive action of calomel, to whom he gave combinations of Spessac, Opium and Sugar of Lead for the purpose of suppressing it. The medicine was urged to such

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an extent as to vomit the patient whose stom-  
-ach was very irritable and who at the time  
was violently salivated. The Doctor observed  
a great change for the better in the condition  
of the mouth very soon after the effort of  
puking, and believing that it was owing to  
the emetic, he determined to give the medi-  
-cine a fair trial as soon as circumstances  
would permit. -

Having a very extensive range  
of practice he soon met with a number of  
opportunities to try the virtue of emetics under  
such circumstances, which he did to the full  
confirmation of his belief. -

Many other highly  
respectable practitioners of Virginia, after nu-  
-merous trials with emetics in severe cases of  
salivation, speak now so warmly in their  
favour that their use has become almost





universal in the south-eastern section of the state. -

Dr. Seild being called to a patient labouring under a severe salivation, directs an emetic to be given and the stomach to be washed out with Camomile tea. The evening is his favourite time for exhibiting the emetic, which generally procures the patient a comfortable night's rest. In cases of great emergency he directs as many as three emetics during the day which he never knew to fail arresting the salivation if they succeeded in puking the patient. -

From the great success he has uniformly met with from emetics in violent salivations, Dr. Seild thinks they never would fail if timely resorted to and pushed far enough. They arrest the hemorrhage which sometimes proceeds from



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the mouth, cheek gangrene, reduce the swell-  
-ling of the face and tongue, lessen the in-  
-flammation of the affected parts and allay  
general irritability in such a manner as to pro-  
-cure ease and quiet for the patient.-

The follow-  
-ing case which was furnished me by Dr.  
John Keil another eminent practitioner of  
Virginia and a graduate of this University,  
will show very obviously the advantages  
of emetics in these cases.- "I directed ten  
grains of calomel to be given at bed time  
two nights in succession, to be purged off  
each succeeding morning, actively with salts  
and magnesia. The calomel was exhibited  
as above directed, but the friends of the  
patient omitted giving the salts and mag-  
-nesia. There was no operation from the  
two doses of calomel for three days. The



third day I was called to the patient - the face and head were swelled to an enormous size, so as scarcely to discover the nose and eyes - the inside of the lips and gums was of a dark red colour - there was an oozing of blood from the mouth and what little I could see of the tongue was black. The mouth was very painful and offensive and deglutition very difficult. I apprehended the patient would die from mortification speedily if the usual treatment to arrest the salivation was observed. - I had heard of the cure of emetics in such cases by Dr. H. Seidel of Birm-  
-burg. I therefore ordered 2 grs of Tart. An-  
-timo: and 25 grs of Opaei; which was taken with great difficulty. In the course of a short time it operated five or six times copiously, discharging each time a large quantity of thick tough phlegm. The stomach was



washed out with camomile tea. After the operation of the emetic I ordered the bowels to be opened that evening with salts. The next day I visited the patient. she was very much relieved - swelling much reduced - appearance of the mouth improved - not much fetor and swallowing performed with more ease. I ordered the emetic to be repeated, to be followed by a dose of salts; and astringent washes for the mouth in a short time completed the cure. -

In some cases of salivati-  
-on a bullet like tumour may be observed in one of the cheeks very much inflamed and apt to run very speedily into mortifica-  
-tion. Dr Strachan of Petersburg thinks that emetics are of no avail in such cases. But Dr Heild during the last summer had a patient with this bullet like tumour





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whom he cured with emetics very effectually.

Dr. Sindy of Ohio has lately recommended nauseating doses of emetics for salivation, but the practitioners of the south are decidedly in favour of puking.

Besides puking, the patient, his bowels should be kept soluble with salts or castor oil, which should be given in the morning on an empty stomach. His mouth should be carefully cleaned three or four times a day with some mild astringent wash, such as an infusion of rose leaves or of sage, sweetened with honey, to which a little borax may be added.

The  
*Capsicum annuum* used as a gargle, is an article of high standing, in the south for mercurial affections of the mouth



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and throat. It acts I suppose on the principle of a blister in relieving local inflammation. -

Besides the local remedies mentioned, several others are sometimes used, among which may be enumerated the infusion of bark or of galls, lime water, sugar of lead and the diluted mineral acids. -

Opium is sometimes given to relieve pain and to check the discharge. -

But of all the remedies used for inordinate salivation, emetics, in the southern part of Virginia, occupy by far the highest rank. In the course of a conversation with Dr. Field on the great advantages to be derived from them, he mentioned that he had seen several cases of violent

and that the rest of the paper on the  
subject of a bill in relation to  
the same.

Should the bill be  
passed, it would be a  
great step towards the  
solution of the problem  
of the future of the  
country.

It is a bill which  
will be of great  
importance to the  
country.

But of all  
the bills which  
have been introduced  
in the House of  
Representatives  
in the course of  
the last session  
it is the one which  
has attracted the  
most attention  
of the public.

salivation terminate fatally previous to the use of emetics in their case, which, he firmly believed, might have been effectually remedied by them. To this belief he was led by having since seen several cases successfully treated with emetics under precisely similar circumstances. —

On what principle emetics act in relieving Mercurial salivation has never been so far as my information goes, exactly explained. It is not my purpose to attempt a positive explanation of their *modus operandi* in these cases, but as all suggestions in medical science are considered of some importance, I will make one or two on this part of my subject, with the hope, that if they prove lame and defective, they may be considered as suggestions only. —



It is well known that the stomach sympathises with nearly the whole system. That there is a very great sympathy between it, the mouth, fauces and salivary glands, seems to be evident from the fact of a nauseating dose of an emetic when taken into the stomach, increasing the discharge of saliva and relaxing the vessels of the mouth. In this case the stomach is primarily operated on by the nauseating dose and the mouth, fauces and salivary glands are affected secondarily through the medium of sympathy. A full dose of an emetic would have the same effect but in a greater degree. Another fact also which tends to prove the sympathetic connection between the stomach and the parts mentioned, is, that a vomiting may be excited by tickling the internal fauces with a feather, or

It is well known that the human organism  
is not a simple machine. It is a complex  
of many parts, each of which is  
connected with the others. The  
brain is the center of the system,  
and it is through the brain that  
the various organs of the body  
are connected. The brain is the  
seat of the mind, and it is  
through the mind that the  
various organs of the body  
are controlled. The mind is the  
source of all our thoughts and  
actions, and it is through the  
mind that we are able to  
control our bodies. The mind is  
the most important part of the  
human organism, and it is  
through the mind that we are  
able to achieve our goals.



by rubbing tartar emetic on them and the root of the tongue. When we consider too, that the mucous coat of the stomach is a continuation of that which lines the mouth, pharynx and oesophagus, it becomes a matter of no surprise whatever that there should be such a great sympathy between these parts. —

Now in cases of mercurial salivation, I suppose that the mercury makes its peculiar impression first upon the stomach and afterwards through the medium of sympathy, the mouth, fauces &c, sooner or later receive this peculiar mercurial impression, which becomes modified by the difference in the structure and office of the parts. Such a supposition I think may be reasonably made when mercury is internally exhibited.



In cases of calivation from the external application of mercury, the stomach (even if it is not first affected) from its great sympathy with the mouth, fauces and salivary glands, may take on a condition, similar to the one it receives when mercury is internally given, which serves to keep up the irritation in the mouth, fauces and other parts. That the stomach does become affected under such circumstances, is countenanced by the facts of the irritable state of that organ and the great loss of appetite sustained in severe cases of the mercurial disease brought on by repeated mercurial frictions. In the slighter cases however the stomach is not so obviously affected, but may take on a latent morbid condition dependent upon mercury and calculated in some



degree to keep up its morbid irritation in the mouth. The stomach being we may say the seat of life itself, possesses great conservative powers, and hence its appearance little participation in the slightest forms of the mercurial disease. —

The stomach then I suppose to be intimately concerned in inordinate salivations, and that it takes on a latent morbid condition which serves to keep up the irritation in the mouth and throat. This condition I suppose to be altered by the operation of an emetic and one of a healthy nature supervenes, which through the medium of sympathy is extended to the mouth and throat. Hence we in some measure account for the healing disposition that the ulcers in these parts assume after the



operation of emetics.

But I would not confine the curative action of emetics in salivation, to the alteration of the condition of the stomach alone. We know they have a great effect in equalizing the circulation and promoting absorption. In salivation the mouth, the fauces or the salivary glands are very much inflamed, sometimes extremely painful and their vessels much congested. There is a determination of blood to the affected parts in all local inflammations, giving rise to congestion, swelling and their consequences. Now after the operation of the emetic in cases of salivation, the circulation becoming more equalized, the determination of blood to the affected parts is not so great as before, which is a circumstance strongly favouring the cure of all local inflam-





= mations.

Absorption also is promoted by the emetic and the congested vessels be-  
= coming, in this way, disengaged, leave the  
parts, <sup>up</sup>swollen and painful.

Perhaps the acrid mercurial saliva which it is possible for the patient to swallow during imperfect sleep, may serve in some degree to keep up the local irritation, and emetics by emptying the stomach of this may there-  
= by assist the cure. —

I have now finished what I had to say on mercurial salivation, and al-  
= though I am confident of not having done that justice to the subject which its importance demands, I hope to meet with the indulgence of those to whose ser-  
= vicing I cheerfully though diffidently sub-



= mit this essay. the productions of a comparatively undisciplined mind, can not but appear trifling when viewed through the medium of talents, deep research and philosophical study. Thus, mine must appear when viewed by the Professors of the Pennsylvania University. —

with this view, the production of a  
compendious manuscript book, in  
which the various subjects of the  
course are treated in a systematic  
manner, and the student is enabled  
to review the whole of the course  
in a few days. The book is  
written in a plain, simple style,  
and is intended to be used as a  
reference book, and not as a  
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